Yifeng Ding



Research Interests

My research interest lies in Large Language Models (LLMs) for Code. My ongoing works include improving LLMs with **Instruction Tuning** and **Mixture-of-Experts** (**MoE**) for better code generation and automated debugging.

Education

Since 2022 University of Illinois Urbana-Champaign (UIUC),

Ph.D. student in Computer Science, Advisor: Prof. Lingming Zhang

2018–2022 Tsinghua University,

B.S. in Software Engineering,

Double Major: B.S. in Business Administration

Publications

- [1] **Yifeng Ding**, Jiawei Liu, Yuxiang Wei, and Lingming Zhang. "XFT: Unlocking the Power of Code Instruction Tuning by Simply Merging Upcycled Mixture-of-Experts". [preprint].
- [2] Yuxiang Wei, Zhe Wang, Jiawei Liu, **Yifeng Ding**, and Lingming Zhang. "Magicoder: Source Code Is All You Need". *arXiv*. [preprint].
- [3] Chunqiu Steven Xia, **Yifeng Ding**, and Lingming Zhang. "The Plastic Surgery Hypothesis in the Era of Large Language Models". 38th IEEE/ACM International Conference on Automated Software Engineering (ASE 2023). [paper].
- [4] Quan Zhang, Yongqiang Tian, **Yifeng Ding**, Shanshan Li, Chengnian Sun, Yu Jiang, and Jiaguang Sun. "CoopHance: Cooperative Enhancement for Robustness of Deep Learning Systems". 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2023). [paper].
- [5] Quan Zhang, **Yifeng Ding**, Yongqiang Tian, Jianmin Guo, Min Yuan, and Yu Jiang. "AdvDoor: Adversarial Backdoor Attack of Deep Learning System". 30th ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2021). [paper].

Academic Service

Organizing The First International Workshop on Large Language Models for Code (LLM4Code 2024), Committee co-located with ICSE 2024

Talk

[1] Uber Programming Systems Team: Equipping Large Language Models with Domain-Specific Knowledge for Automated Program Repair

Honors & Awards

- 2021 Research Excellence Scholarship, Tsinghua University
- 2019 Academic Excellence Scholarship, Tsinghua University